## **Recovery Plan Action Status**

Plan Name: Uncompangre Fritillary Butterfly

Plan Status: Final Plan Date: 17-Mar-94 Lead Agency: USFWS

Lead Office: Western Colorado Ecological Services Field Office 243-2778)

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Uncompangre fritillary butterfly (Boloria acrocnema)	1	1	Enforce prohibition on collecting	Ongoing Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Law Enforcement Division, Forest Service, Bureau Land Management , USFWS Regional Office 6 - Denver	Other: Law Enforcement	Internal Field Assistance	LE costs = 5K/year. BLM costs = 5K/year. FS costs = 5K/year.
Uncompangre fritillary butterfly (Boloria acrocnema)	1	2.1	Determine search locations	Ongoing Current	Prior to FY 1995		Forest Service , Bureau Land Management	Research: Population Surveys	Contract	BLM costs = 1K/year. FS costs = 5K/year.
Uncompahgre fritillary butterfly (Boloria acrocnema)	1	2.2	Organize searchers	Ongoing Current	Prior to FY 1995		Forest Service , Bureau Land Management	Research: Population Surveys	Contract	BLM costs = 0.5K/year. FS costs = 0.5K/year.
Uncompangre fritillary butterfly (Boloria acrocnema)	1	2.3	Search for Colonies	Ongoing Current	Prior to FY 1995		Forest Service , Bureau Land Management	Research: Population Surveys	Contract	BLM costs = 3K/year. FS costs = 3K/year.
Uncompangre fritillary butterfly (Boloria acrocnema)	1	3.1	Monitor population levels	Ongoing Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Ecological Services Division, Forest Service, Bureau Land Management , USFWS Regional Office 6 - Denver	Research: Population Surveys	Contract	ES costs = 1K/year. BLM costs = 2K/year. FS costs = 2K/year.
Uncompangre fritillary butterfly (Boloria acrocnema)	2	3.2	Determine oviposition sites	Complete	Prior to FY 1995	Prior to FY 1995	U.S. Fish and Wildlife Service, Ecological Services Division, Forest Service , Bureau Land Management , USFWS Regional Office 6 - Denver	Research: Habitat Requirements	Graduate Student	Completed in 1993. Oviposition snow willow and surrounding litter.
Uncompahgre fritillary butterfly (Boloria acrocnema)	2	3.3	Determine larval life history	Complete	Prior to FY 1995	Prior to FY 1995	U.S. Fish and Wildlife Service, Ecological Services Division, Forest Service , Bureau Land Management , USFWS Regional Office 6 - Denver	Research: Other Information	Graduate Student	Partially completed. Most larvae are probably biennial but potential exists for 1 year development. ES costs = 1K. BLM costs = 1K. FS costs = 1K.

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Uncompahgre fritillary butterfly (Boloria acrocnema)	2	3.4.1	Record snow, rain, and air temp. levels	Discontinued	Prior to FY 1995	FY 2006	U.S. Fish and Wildlife Service, Ecological Services Division, Forest Service , Bureau Land Management , USFWS Regional Office 6 - Denver	Research: Other Information	Contract	May continue if we wish to monitor for climate change. ES costs: FY1 = 3K, FY2&3 = 0.5K/year. BLM costs: FY1 = 3K, FY2&3 = 0.5K/year. FS costs: FY1 = 3K, FY2&3 = 0.5K/year.
Uncompahgre fritillary butterfly (Boloria acrocnema)	2	3.4.2	Determine soil moist. And temp.	Discontinued	Prior to FY 1995	FY 2000 - FY 2004	U.S. Fish and Wildlife Service, Ecological Services Division, Forest Service , Bureau Land Management , USFWS Regional Office 6 - Denver	Research: Other Information	Contract	May continue if we wish to monitor for climate change. ES costs: FY1 = 1K, FY2&3 = 0.5K/year. BLM costs: FY1 = 1K, FY2&3 = 0.5K/year. FS costs: FY1 = 1K, FY2&3 = 0.5K/year.
Uncompahgre fritillary butterfly (Boloria acrocnema)	2	3.4.3	Determine elev., slope, aspect, of new colony sites	Ongoing Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Ecological Services Division, Forest Service, Bureau Land Management , USFWS Regional Office 6 - Denver	Research: Habitat Requirements	Contract	Contingent on finding new colonies (ca, \$1000/agency/yr).
Uncompangre fritillary butterfly (Boloria acrocnema)	2	3.4.4.1	Monitor morphologic phenology of snow willow	Complete	Prior to FY 1995	Prior to FY 1995	U.S. Fish and Wildlife Service, Ecological Services Division, Forest Service, Bureau Land Management , USFWS Regional Office 6 - Denver	Work type not yet selected	Labor type not yet selected	Completed 1993. No apparent correlation.
Uncompahgre fritillary butterfly (Boloria acrocnema)	2	3.4.4.2	Monitor phenology of nectar sources	Complete	Prior to FY 1995	FY 1995 - FY 1999	U.S. Fish and Wildlife Service, Ecological Services Division, Forest Service, Bureau Land Management , USFWS Regional Office 6 - Denver	Research: Habitat Requirements	Graduate Student	Partially completed 1993. Correlation not yet determined but may exist. ES costs = 0.5K, BLM costs = 0.5K, FS costs = 0.5K.
Uncompahgre fritillary butterfly (Boloria acrocnema)	3	4.1	Determine disease, parasitism, predation threats	Obsolete			U.S. Fish and Wildlife Service, Ecological Services Division, Forest Service, Bureau Land Management , USFWS Regional Office 6 - Denver	Research: Predation	Graduate Student	Some suspected minor predation by brown-capped rosy finch but no other predation, disease, or parasitism problems noticed that caused reason for research. ES costs = 0.25K/year. BLM costs = 0.25K/year. FS costs = 0.25K/year.

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Uncompahgre fritillary butterfly (Boloria acrocnema)	3	4.2	Determine livestock threats	Complete	FY 2009	FY 2009	U.S. Fish and Wildlife Service, Ecological Services Division, Forest Service , Bureau Land Management , USFWS Regional Office 6 - Denver	Work type not yet selected	Contract, Internal Administrative	Some potential impacts noted on Mt. Uncompahgre from sheep grazing but no intensive research. A section 7 concurrence letter was issued on 12/16/2008 to the USFS telling them sheep grazing did not appear to be a threat based on stable populations of the UFB the last several years and no long-term habitat impact noted. Short-term impacts noted by researchers.
Uncompahgre fritillary butterfly (Boloria acrocnema)	3	4.3	Determine recreation threats	Ongoing Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Ecological Services Division, Forest Service , Bureau Land Management , USFWS Regional Office 6 - Denver	Management: Land Use	Contract, Graduate Student	Some impacts from hiking trails noted and trails moved; signs also erected asking people to stay on trails. ES costs = 0.25K/year. BLM costs = 0.25K/year. FS costs = 0.25K/year.
Uncompahgre fritillary butterfly (Boloria acrocnema)	2	5.1	Propagate related species	Obsolete			U.S. Fish and Wildlife Service, Ecological Services Division, USFWS Regional Office 6 - Denver	Management: Propagation	Contract	Never implemented due to finding more colonies. All costs are ES.
Uncompahgre fritillary butterfly (Boloria acrocnema)	2	5.2	Propagate butterfly	Obsolete			U.S. Fish and Wildlife Service, Ecological Services Division, USFWS Regional Office 6 - Denver	Management: Propagation	Contract	Never implemented due to finding more colonies. Priority 1 if reintroduction necessary (ca. \$5000/yr).
Uncompahgre fritillary butterfly (Boloria acrocnema)	3	6.1	Reintroduce butterflies	Obsolete			U.S. Fish and Wildlife Service, Ecological Services Division, Forest Service, Bureau Land Management , USFWS Regional Office 6 - Denver	Management: Reintroduction	Contract	Never implemented due to finding more colonies. Contingent on Redcloud colony size, finding new colonies. (ca \$1000/agency/yr).

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Uncompahgre fritillary butterfly (Boloria acrocnema)	3	6.2	Transplant to other suitable sites	Obsolete			U.S. Fish and Wildlife Service, Ecological Services Division, Forest Service, Bureau Land Management , USFWS Regional Office 6 - Denver	Management: Reintroduction	Contract	Never implemented due to finding more colonies. Contingent on Redcloud colony size, finding new colonies. (ca \$1000/agency/yr).
Uncompahgre fritillary butterfly (Boloria acrocnema)	2	7	Conduct recovery team activities	Ongoing Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Ecological Services Division, University of Nevada at Reno, Colorado Department of Natural Resources, FWC/Office of Information Services, Forest Service , Bureau Land Management , USFWS Regional Office 8	Management: General	Internal Administrative, Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	R6 ES costs = 2K/year. R8 BLM costs = 1K/year. FS costs = 1K/year. CDNR costs = 1K/year. USD costs = 1K/year.
Uncompahgre fritillary butterfly (Boloria acrocnema)	2	8	Contract administration	Ongoing Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Ecological Services Division, Forest Service, Bureau Land Management , USFWS Regional Office 6 - Denver	Other: Administration	Internal Administrative	FS and BLM have typically been administering contract with graduate student/Western State College professor to conduct field research, monitorin g, and preparation of field reports. FWS ES has rarely had money to contribute and rarely did own contract. ES costs = 1K/year. BLM costs = 1K/year. FS costs = 1K/year.
Uncompahgre fritillary butterfly (Boloria acrocnema)	3	9	Erect signs	Ongoing Current	Prior to FY 1995		Forest Service , Bureau Land Management	Management: Land Use	Internal Administrative	Forest Service completed 1993. BLm and FS have erected signs instructing people to stay on trails and informing them of sensitive nature of alpine ecosystem and rare species presence. BLM costs = 1K for FY1.